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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,681	09/23/1999	FREDRIC S. YOUNG	17003-23-00U	4988

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EXAMINER

CRAIG, DWTN M

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 06/16/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

SR

**Office Action Summary**

Application No.

09/401,681

Applicant(s)

YOUNG, FREDRIC S.

Examiner

Dwin M Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3, 5, 6, 7, 8 & 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. **Claims 1, 2, 4, 10 and 11** have been cancelled. **Claims 3 and 5-9** have been presented for reconsideration based on the Applicants amended claim language.

#### **Response to Arguments**

2. Applicant's arguments presented on 3-2-2004 have been fully considered. The Examiners response is as follows:

2.1 Regarding Applicants response to the 35 U.S.C. 103 rejections of Claims 1-3, 5 and 8-11:

The Examiner has found Applicant's amendments to be persuasive over the prior art and withdraws the earlier rejections of Claims 1-3, 5 and 8-11.

2.2 Applicant's claim language has been reviewed and the following rejections have been applied.

#### **Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 3, 5, 6, 7, 8 and 9** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**3.1** In the defining of a balanced state in independent **Claim 6** the zero error seems to correspond to a mathematical critical point in thermodynamic energy. Such a critical point reasonably is that energy which obeys the laws of thermodynamics, which apparently from all scientific measurements always are obeyed. Thus, as defined, there is always zero error for each node in this simulation. Therefore, there can be no sensing of non-zero error thus making the claim lacking in enablement.

**3.2** In the last three lines of claim 6 a depiction is set forth in five dimensions. Any such depiction can never be enabled. All depictions are one, two, or three dimensional (holograms) at best and other dimensions may only be depicted via some type of series of depictions in lower dimensions such as one, two or three.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**3.3** **Claims 3, 5, 6, 7, 8 and 9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 6**, lines 1-2, cites simplifying a simulation of a complex dynamic system which is indicative of some type of pre- and post-simplification states, neither of which are set forth in the claim thus making it vague and indefinite.

The second temporal dimension (**Claim 6**, last 2 lines) is not defined as to its cooperatively to the remainder of the claimed limitations.

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**Claim 7** is rejected under 35 U.S.C. 112 second paragraph because it is unclear how the feedback limitation is related to the model. There is no indication as to where the feedback begins and to where the feedback ends, and what relationship the feedback has to the five orthogonal dimensions.

As regards **Claim 5** it is unclear to the Examiner exactly what kind of pathways are being claimed.

### **Conclusion**

**4. Claims 1, 2, 4, 10 and 11** have been cancelled. **Claims 3 and 5-9** have been rejected under 35 U.S.C. 112.

**4.1** The Applicant is strongly encouraged to contact the Examiner and come in for an interview with the Examiner and the Examiner's Supervisor to demonstrate Applicant's invention.

**4.2** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Thalhammer-Reyero U.S. Patent 5,930,154 teaches modeling of complex biochemical systems.

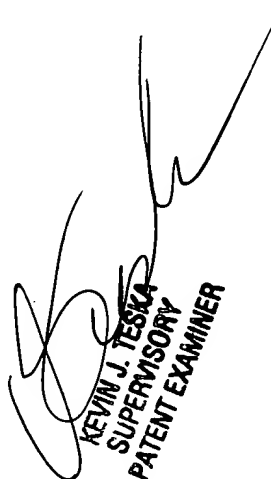
**4.3** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is 703 305-7150. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703 305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC



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